

Take the strain out of tensile testing!

The AlphaFlex10[™] delivers convenient tensile testing for a wide range of materials, including elastomers and non-rigid plastics.

Benefits of the AlphaFlex10[™] include:



The seamless integration of Enterprise software that connects to all your other Alpha instruments



The convenience of retaining the same service person you already use for all your Alpha instruments



Faster service times and individualized experience you've come to know and love from Alpha

AlphaFlex10[™] Tensile Tester Specifications:

FRAME SPECIFICATIONS			
Frame Capacity	kN	10	
	kg	1,000	
	lbf	2,000	
Proof Tested	50%		
Test Zone	One		
Number of Columns	Two		
Distance Between Columns	mm	410	
	in	16	
Maximum Crosshead Travel	mm	1090	
	in	43	

CONTROLLER SPECIFICATIONS			
Max Data Processing Rate 168MHz			
Data Acquisition Rate at PC	1000Hz		

FORCE MEASUREMENT			
Force Measuring Device Type	Strain Gage-based load cell		
Resolution	One Part in 8,388,608		
Accuracy	0.2% of Applied Force Across Load Cell Force Range		
	0.2-100%		
Range	10N load cell - 0.5-100%		
	5N load cell - 1-100%		
Calibration Standard	+/- 0.5% to ISO 7500-1, ASTM E4		
Internal Sampling Rate	1000Hz		

EXTENSION MEASUREMENT			
Resolution	0.1 µ m		
Accuracy	+/-50 µ m		
Range	0.1µm to 1090mm		
Calibration Standard	ISO 9513		
Internal Sampling Rate	2.73kHz		

POSITION CONTROL			
	mm/min	0.0001-500 to 10kN	
Tost Smood	mm/min	0.0001-1,000 to 5kN	
Test Speed	in/min	0.000004-20 to 2,000lbf	
	in/min	0.000004-40 to 1,000lbf	
Resolution	μm 0.1 in 0.000004		
Accuracy	+/-0.05% of indicated speed		
Detum Creed Dest Test	mm/min	0.0001-1,000	
Return Speed Post Test	in/min	0.000004-40	
Crossboad Positioning	mm/min	0.0001-1,000	
Crosshead Positioning	in/min	0.000004-40	
Return to Zero Function	Yes		

POWER REQUIREMENTS			
Supply Voltage Options 115/230V			
Frequency	50/60Hz		
Power	530W +/- 10%		

POWER REQUIREMENTS				
Operating Temperature	5-40°C (41-104°F)		Storage Temperature	-10-45°C (14-113°F)
Operating Humidity	10-80% non-condensing wet bulb method		Storage Humidity	10-80% non-condensing wet bulb method

AlphaFlex10™ Accessories

01 Model 100R Mechanical Extensometer

Unique design that ensures an extremely low tracking force for testing sensitive materials Robust construction that can easily withstand high-release forces and breaking energies Simple yet effective follower attachment method for rapid throughput Can be fitted to all sizes of screw-driven materials testing machines Compatible with the same software as all other Alpha Technologies testing machines

02 Model 500 LC Laser Extensometer

Non-contacting design is ideal for use with fragile samples Low-power helium neon laser with precision optical components Dedicated 16-bit processor Ideal for measuring the strain of specimens inside an environmental chamber Temperature range -70 to °C 300 (-94 to 572°F)

03 Pneumatic Grips

4 available faces, including hands-free options

04 Bollard Vice Clamps

4 sizes available

05 Medium Duty Scissor Action Grip

1 option with 2 cross-cut faces

06 Knurled Roller Grips

3 options, including self-tightening and stirrup

07 3-Point Bend Grips

13 sizes available



AlphaFlex10™ Standards

Alpha Technologies has been a leader in rheology testing, software, and support for 60 years. Our innovations and inventions have been true game-changers in the rubber and polymer industries. Trust Alpha to take your processes further while helping you meet industry standards of internationally recognized associations, including:

ASTM: D412	D575	D624 Tear	D413
Standard tensile	Compression	Strength	Adhesion
D885 Cord	D0790 -	D429 - Peel	D2790 - Tire
Tensile	3-point Bend	Adhesion	Cord Tests

